Foreword

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The Third International Congress of Palaeoentomology, the Second International Meeting on Palaeoarthropodology and the Second World Congress on Amber and its Inclusions gathered more than 60 delegates from 19 countries under the title of "Fossils X 3" at the South African National Biodiversity Institute in Pretoria, South Africa, from 7-11 February 2005. The participants covered a broad range of topics, highlighting insect phylogeny and systematics (21 papers, 11 posters), other arthropods (4, 5), assemblages (10, 4), biodiversity (8, 1), taphonomy and trace fossils (10, 0), amber (5, 4) , and miscellaneous (5, 2).

This volume, serving as a partial Proceedings of that Congress, also embraces a wide spectrum of subjects and presents 18 refereed papers, which are grouped into three sections.

The section on **Palaeoecology and Taphonomy** comprises five articles. Two feature taphonomy and environmental reconstructions of the Lower Permian insect beds of Kansas and Oklahoma, USA, and the Upper Permian Belmont insect beds in Australia. Two other papers are dedicated to interactions between insects and plants, and the last article highlights the ecological role of phantom-midge larvae in the Eocene Lake Messel, Germany.

As always, a majority of papers falls under **Taxonomy and Phylogeny**. Ten articles contain descriptions of 3 new families, 17 new genera, and 19 new species. Nine new combinations and 56 new synonymies are proposed. The papers cover an impressive range of Palaeozoic, Mesozoic and Cainozoic groups represented by compression fossils or inclusions in fossil resins, from localities in Argentina, Botswana, Brazil, China, the Czech Republic, England, Germany, France, Lebanon, and Russia. The following higher taxa are dealt with: Araneae, Paoliida, Grylloblattida, Blattaria, Hemiptera, Mecoptera, Diptera, and Hymenoptera. One paper continues the long-standing dispute about the dawn of insect evolution, comparing aquatic and terrestrial models of insect origins.

The last section, **Amber Studies**, offers two very important contributions that provide a profound analysis of arthropod assemblages from Eocene and Cretaceous resins.

There are also three brief notes, on new insects found in the Upper Jurassic Talbragar beds in New South Wales, Australia, on the IGCP 469 international project on the Late Variscan terrestrial biotas and palaeoenvironments, and on EDNA, the world-wide fossilinsect catalogue.

An electronic version of these Proceedings is available in the on-line Library of the International Palaeoentomological Society, as is the programme and abstracts of the Congress.

We take this opportunity to express our deep gratitude to the many referees whose critical scrutiny improved the original manuscripts, and to Mr L. Maphasa, Director of the Natal Museum, for his support in the course of the preparation of the Proceedings. We also thank the authors for their patience during the long period of preparation of the volume. We are extremely grateful to the following for financial and other assistance, without which the Congress could not have taken place: University of KwaZulu-Natal (UKZN); South African National Biodiversity Institute (SANBI); Palaeo-Anthropology Scientific Trust (PAST), specially for financial assistance toward publication of this volume; United Nations Educational, Scientific and Cultural Organization (UNESCO), specially to enable attendance by delegates from Africa; Justin James Advertising; Vacutec; Tau Safaris.

We hope that publication of this volume will encourage further studies of ancient arthropods, and we shall be able to see each other and discuss cutting-edge issues at the symposium, *Insects in Palaeoenvironments*, to be held during the XXIII International Congress of Entomology (ICE 2008) in Durban, South Africa, in 2008.